

Abstract for an Invited Paper  
for the SES10 Meeting of  
The American Physical Society

**Precision measurements in free neutron beta decay**

STEFAN BAESSLER, University of Virginia

The study of neutron beta decay serves to determine the coupling constants of beta decay and allows several precision tests of the Standard Model of Elementary Particle Physics at low energies. For this purpose, the neutron lifetime, and correlations between the momenta and spins of the particles involved are measured. In my talk, I will discuss present experiments, with the emphasis of the neutron beta decay program planned for the fundamental physics beamline at the SNS.